

McBride, et al.
Serial No. 08/984,099

In Office Interview

The Applicants gratefully acknowledge the courteous interview with the Examiner on October 19, 1999.

The Pending Claims

Prior to entry of the above amendments, Claims 1-10, 12-17, 18-39 and 42-57 are pending. Claims 1-5, 7-8, 28-35, 42-50 and 55-57 are directed to DNA sequences; 9-10, 36-37 and 51-52 to DNA constructs; 12, 38 and 53 to a plant cell; 13, 39 and 54 to a plant; 14-27 to a method of modifying fiber phenotype of a cotton plant.

Amendments

Support for amending Claims 1, 44 and 57 to recite hybridization and wash conditions is found on page 30, lines 4-8.

Support for amending Claim 1 to recite "cotton" 4-4 and rac promoters is found in Example 2, page 30, line 26 through page 31, line 25.

Amendments to Claims 28-39 and 42-57 were made to correct claim dependencies to correlate with the Claims as they were renumbered.

Claim 29 was cancelled and appropriately written as new Claim 58.

Support for amending Claim 43 to recite SEQ ID NO:15 is found on page 9, lines 18-19.

Support for new Claim 59 is found in original Claims 1-13 as filed and renumbered by the Examiner, on page 9, lines 10-20 and on page 30, lines 4-8.

Support for new Claim 60 is found on page 31, lines 22-24.

Support for the sequences recited in new Claims 61-64 is found on page 9, lines 10-20, and Figures 1-7.

Support for the hybridization conditions recited in new Claim 64 is found on page 30, lines 4-8.

No new matter has been added by the above amendments and the Examiner is respectfully requested to enter them.

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Terminal Disclaimer

A Terminal Disclaimer is included to avoid the Double Patenting rejection over co-pending Application No. 08/480,178.

Operability of the Claimed Invention

The information disclosed in the instant application is the same as that disclosed in PCT application PCT/US96/09897 (a copy of which is attached hereto for the Examiner's convenience), but additional data are provided in the PCT application that further demonstrate operability of the claimed invention. As an example, using the same methodology as was used for obtaining the Rac9 and Rac13 promoters, an additional clone was isolated (#105, Example 2, page 29, lines 10-14); and the promoter region immediately 5' to the coding region obtained (see Figure 7 for sequence). The promoter so identified is maximally expressed in cotton fiber and is active throughout the fiber development period (see Example 4, page 32).

Cotton transformation was performed as described in Example 10 (Example 8 in the instant application). Examples 11 and 12, beginning on page 45, are new to the PCT application, and provide the results of expression of transgenic pigment synthesis genes, including those for melanin and indigo. Anthocyanin constructs are described on page 16, line 6 through page 17, line 14 and in Example 9, page 42 and in the instant application on page 19, line 8, through page 20, line 22.

Two color drawings are included with this response to support the data that is provided in the PCT application. The first figure shows indigo production (blue color) in developing cotton fibers pCGN 5616 (page 46, line 18 through page 47, line 18) as compared to fibers from non-transgenic Coker fibers. The second figure shows production of melanin in cotton fibers (light brown color) (pCGN 5149) (see page 46, lines 13-16) and anthocyanin (pCGN 4770) as compared to wild type Coker fibers. Anthocyanin production as shown results in golden hued cotton fibers.


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CONCLUSION

In view of the above amendment and remarks, it is submitted that this application is now ready for allowance. Early notice to that effect is solicited. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (650) 328-4400.

Respectfully submitted,

Dated: December 15, 1999


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